Amendments to the Claims

Kindly amend claims 1, 3, 8 and 9, as set forth below, and add new claim 10. In compliance with the Revised Amendment Format published in the Official Gazette on February 25, 2003, a complete listing of claims is provided herein. The changes in the amended claims are shown by strikethrough (for deleted matter) and underlining (for added matter).

1.   (Currently Amended) A computer implemented method for backing up a file system comprising the steps of:

generating a list of inodes, in inode number order, that have changed, said list including inode numbers;

generating a table which has names and inode numbers for all files currently in the file system;

sorting said ~~list~~ table by inode number;

merging said list and said table by inode number, whereby ~~relevant~~ inodes that have changed and file names associated with the inodes that have changed are provided in a single entity; and

backing up files based on said merged list and table to provide backed-up files.

2.   (Original) The method of claim 1 in which said inode number also includes a generation number.

3.   (Currently Amended) The method of claim 1 further including the step of storing said merged list and table in ~~its~~ said merged list and table's own file, referred to as a shadow name space file.

4.   (Original) The method of claim 3 further including the step of accessing said shadow name space file in blocks.

5.   (Original) The method of claim 4 in which said blocks are partitioned and said backing up is performed by at least two independent processors with each processor backing up files indicated in said partition.

6.   (Original) The method of claim 5 in which said partitioning is based upon estimated time for completion of file backup for files indicated in said partition.

7.   (Original) The method of claim 1 in which said backup is carried out in the same order as indicated in said merged list and table.

8.   (Currently Amended) A computer program product, for At least one program storage device readable by at least one computer, tangibly embodying at least one program of instructions executable by the at least one computer to perform a method for backing up a file system, said method comprising: file system backup, stored on a machine readable medium having program means thereon for (1)

generating a list of inodes, in inode number order, that have changed, said list including inode numbers;

(2) generating a table which has names and inode numbers for all files currently in the file system;

(3) sorting said list table by inode number;

(4) merging said list and said table by inode number, whereby relevant inodes that have changed and file names associated with the inodes that have changed are provided in a single entity; and

(5) backing up files based on said merged list and table to provide backed-up files.

9.   (Currently Amended) A data processing system comprising:

a central processing unit;

a random access memory for storing data and programs for execution by said central processing unit;

a nonvolatile storage device;

program means, for file system backup, stored within said memory for (1) generating a list of inodes, in inode number order, that have changed, said list including associated inode numbers; (2) generating a table which has names and inode numbers for all files currently in the file system; (3) sorting said ~~list~~ table by inode number; (4) merging said list and said table by inode number, whereby ~~relevant~~ inodes that have changed and file names associated with the inodes that have changed are provided in a single entity; and (5) backing up files based on said merged list and table.

10.   (New) The method of claim 1, wherein the generating of the list of inodes is performed at back-up time, instead of at application processing time to avoid at least one of overhead in logging changes at execution of each application and redundant entries for files that are modified multiple times.